#### City of Tracy

# Tracy Wastewater Treatment Plant Proposed Tentative NPDES Permit, Time Schedule Order, and Waste Discharge Requirements (WDRs) Regional Water Quality Control Board, Central Valley Region Board Meeting – 3/4 May 2007 ITEM #17

#### 1. In the NPDES Permit, Section I Facility Information

Discharger	City of Tracy
Name of Facility	Tracy Wastewater Treatment Plant
	3900 Holly Drive
Facility Address	Tracy, CA 95304
	San Joaquin County
Facility Contact, Title, and	Mr. Steve Bayley, Deputy Director of Public Works (209) 831-4434
Phone	Casey Wichert, Operations Manager, (209) 831-4489
Mailing Address	SAME
Type of Facility	POTW
Facility Design Flow	9.0 million gallons per day (mgd) (with expansion to 16 mgd)

#### 2. In the NPDES Permit, Limitations and Discharge Requirements, Section II.F:

Modify the paragraph as follows:

- F. **Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations (CFR)<sup>1</sup> require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at Part 133 and Best Professional Judgment (BPJ) in accordance with Part 125, Section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- 3. In the NPDES Permit, Limitations and Discharge Requirements, Section IV.A.1.a. Table 4 (Final Effluent Limitations):

Modify Table 4, as follows:

**Table 4. Effluent Limitations** 

			E	Effluent Limitation	ns	
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Settleable Solids	mL/L	0.1		0.2		
Oil and Grease	mg/L	<del>10</del>		<del>15</del>		

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		Effluent Limitations				
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
рН	standard units				6.5	8.5
Aluminum (total recoverable) <sup>2</sup>	μg/L	77		125		
Copper (total recoverable) <sup>3</sup>	μg/L	9.1		10.4		
Iron (total recoverable)	μg/L			300		
Dichlorobromomethane	μg/L	6.8		9.5		
Chlorodibromomethane	μg/L	3.6		7.6		

4. In the NPDES Permit, Limitations and Discharge Requirements, Section IV.A.5. Interim Effluent Limitations

Modify Table 8 as follows:

Table 8: Interim Effluent Limitations (non-CTR constituents)

		Effluent Limitations					
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
DOD 5 don 200C	mg/L	20	40	50			
BOD 5-day 20°C	lbs/day <sup>1</sup>	1501	3002	3753			
Total Suspended Solids	mg/L	20	40	50			
	lbs/day <sup>1</sup>	1501	3002	3753			
Ammonia (as N)	mg/L			42			
	lbs/day <sup>1</sup>			3156			
Aluminum	<del>μg/L</del>			<del>140</del>			
<sup>1</sup> Based on a design	treatment capacity	y of 9 mgd (see Se	ection VII. <u>F</u> K. for	procedures for co	mpliance determina	ation)	

Modify the following paragraph and Table 9 as follows:

e. Effective immediately and until the Discharger complies with Special Provisions VI.C.4.b. or May 18, 2010, whichever is sooner, the discharge of treated effluent shall maintain compliance with the effluent limitations specified in Table 9 at Discharge Point 001, with compliance measured at Monitoring Location M-001 as described in the attached Monitoring and Reporting Program (Attachment E, Section IV). These interim effluent limitations shall apply in lieu of Final Effluent Limitations IV.A.1.a. for the same parameters.

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Table 9: Interim Effluent Limitations (CTR constituents)

		Effluent Limitations				
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper (total recoverable)	μg/L			19		
	lbs/day <sup>1</sup>	==	==	<u>1.4</u>	==	==
Based on a design treatment capacity of 9 mgd (see Section VII.F. for procedures for compliance determination)						

Add the following paragraph and table as follows:

f. Effective immediately and ending on April 30, 2012 the discharge of treated effluent shall maintain compliance with the effluent limitations specified in Table 10 at Discharge Point 001, with compliance measured at Monitoring Location M-001 as described in the attached Monitoring and Reporting Program (Attachment E). These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations specified for the same parameters during the time period indicated in this Order.

**Table 10: Interim Effluent Limitations (Aluminum)** 

			E	Effluent Limitation	<u>1S</u>	
<u>Parameter</u>	<u>Units</u>	Average	Average	Maximum	Instantaneous	Instantaneous
		<b>Monthly</b>	<u>Weekly</u>	<u>Daily</u>	<u>Minimum</u>	<u>Maximum</u>
<u>Aluminum</u>	μg/L			<u>266</u>		

5. In the NPDES Permit, Limitations and Discharge Requirements, Section VI.C.4. Compliance Schedules:

Modify the following

- d. Compliance Schedules for Final Effluent Limitations for Copper
- i. By May 18, 2010, or upon compliance with Special Provisions VI.C.4.b., whichever is sooner, the Discharger shall comply with the final effluent limitations for copper. On November 15, 2005, the Discharger submitted a compliance schedule justification for copper. The compliance schedule justification included all items specified in Paragraph 3, items (a) through (d), of section 2.1 of the SIP. As this compliance schedule is greater than one year, the Discharger shall submit annual progress reports in accordance with the Monitoring and Reporting Program (Attachment E, Section X.D.1.)

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Modify the section as follows:

Full compliance

f. Compliance Schedule for Final Effluent Limitations for Aluminum. By April 30, 2012, or upon compliance with Special Provisions VI.C.4.b., whichever is sooner, the Discharger shall comply with the final effluent limitations for aluminum. The Discharger shall comply with the following compliance schedule.

Task **Date Due** Submit Method of Compliance Work plan/schedule **November 1, 2007** Submit Pollution Prevention plan (PPP)<sup>1</sup> pursuant to **November 1, 2007** CWC section 13263.3 April 30, 2012<sup>3</sup>

Progress reports<sup>2</sup> shall be submitted in accordance with the Monitoring and

Reporting Program (Attachment E, Section X.D.1.).

#### 6. In the NPDES Permit, Limitations and Discharge Requirements, Section VII.E:

Modify the paragraph as follows:

E. Average Daily Discharge Flow Effluent Limitations (Sections IV.A.2.b., IV.A.3.b., and IV.A.4.b.).. The Average Daily Discharge Flow represents the daily average flow when groundwater is at or near normal and runoff is not occurring. Compliance with the Average Daily Discharge Flow effluent limitations will be measured at times when groundwater is at or near normal and runoff is not occurring determined annually based on the average daily flow over three consecutive dry weather months (e.g. July, August, and September).

The minimum requirements for the pollution prevention plan are outlined in the Fact Sheet, Attachment F, Section VII.B.3.d. The Pollution Prevention Plan required herein is not incorporated by reference into this Order.

The progress reports shall detail what steps have been implemented towards achieving compliance with waste discharge requirements, including studies, construction progress, evaluation of measures implemented, and recommendations for additional measures as necessary to achieve full compliance by the final date.

<sup>&</sup>lt;sup>3</sup>—Full compliance is required by April 30, 2012, or upon compliance with Special Provisions VI.C.4.b., whichever is sooner.

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### 7. In the NPDES Permit, Monitoring and Reporting Program, Attachment E, Section IV.A.1. (Effluent Monitoring Table):

Modify the sampling frequency for settleable solids and oil and grease as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency 9	Required Analytical Test Method
Settleable Solids	mL/L	Grab	1/ <u>month</u> day	
Oil and Grease	mg/L	Grab	1/monthweek	

#### 8. In the NPDES Permit, Fact Sheet, Attachment F, Section I, Facility Information

WDID	5B 390108001
Discharger	City of Tracy
Name of Facility	Tracy Wastewater Treatment Plant
	3900 Holly Drive
Facility Address	Tracy, CA 95304
	San Joaquin County
Facility Contact, Title and	Mr. Steve Bayley, Deputy Director of Public Works (209) 831-4434
Phone	Mr. Casey Wichert, Operations Manager, (209) 831-4489
Authorized Person to Sign and	Mr. Steven Bayley, <u>Deputy</u> Director of Public Works
Submit Reports	* * - * - *
Mailing Address	SAME
Billing Address	SAME
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	Category 1
Complexity	Category A
Pretreatment Program	Υ
Reclamation Requirements	Not Applicable
Facility Permitted Flow	9 mgd <sup>(1)</sup>
Facility Design Flow	9 mgd <sup>(1)</sup>
Watershed	Sacramento-San Joaquin Delta
Receiving Water	Old River
Receiving Water Type	Sacramento-San Joaquin Delta

## 9. In the NPDES Permit, Fact Sheet, Attachment F, Section III.A.4. (Anti-Degradation Policy)

Modify the third paragraph as follows:

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This Order authorizes the Discharger to increase the total discharge to surface water from 9 million gallons per day (mgd) to 16 mgd. During this permit term, however, it is expected that the Discharger will only complete the necessary upgrades to increase the discharge to 10.8 mgd. Based on the Discharger's construction schedules, the increase to 16 mgd is not expected until November 1, 2016. The Discharger must comply with the conditions set forth in Sections VI.C.4.b. and VI.C.4.c. prior to increasing the discharge to Old River from 9 mgd to 10.8 mgd and from 10.8 mgd to 16 mgd, respectively. Table F-1 lists the pollutants of concern and the corresponding effluent concentrations and mass loadings. The effluent concentrations for all constituents will remain the same or decrease and the increase in mass for some constituents will increase only very slightly and for some there will be a decrease. In the case of oxygen demanding substances (e.g. BOD, ammonia, nitrate, and nitrite) the concentration and mass will be decreased significantly due to increased treatment. The accommodation of the development, as set forth in the federal antidegration policy and in the Water Code (see Water Code section 13241(e)), justifies lowering of receiving water quality. In this case, however, the Order authorizes very minimal, if any lowering of receiving water quality given the increased level of treatment required by the Order.

## 10. In the NPDES Permit, Fact Sheet, Attachment F, Section IV.C.3.e. (Determining the Need for WQBELs) - Aluminum

Modify the second paragraph as follows:

The MEC for aluminum was 74  $\underline{104}$   $\mu g/L$ , based on 16 samples collected between January 2002 and September 2005, while the maximum observed upstream receiving water aluminum concentration was 1000  $\mu g/L$ , based on 12 samples collected between January 2002 and December 2002. Since the receiving water exceeds the acute and chronic toxicity criteria, no assimilative capacity for aluminum is available and a dilution credit cannot be allowed. Applying 40 CFR section 122.44(d)(1)(vi)(B), effluent limitations for aluminum are included in this Order and are based on U.S. EPA's National Ambient Water Quality Criteria for the protection of the beneficial use of freshwater aquatic habitat. This Order contains final Average Monthly Effluent Limitations (AMEL) and Maximum Daily Effluent Limitations (MDEL) for aluminum of 77  $\mu$ g/L and 125  $\mu$ g/L, respectively (See Attachment F, Table F-6 for WQBEL calculations).

11. In the NPDES Permit, Fact Sheet, Attachment F, Section IV.C.3.t. (Determining the Need for WQBELs) – Oil and Grease:

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Modify the second paragraph as follows:

Based on information included in self-monitoring reports submitted by the Discharger, the effluent oil and grease was non-detectable (<1.0 mg/L) in 47 of 50 samples in 2006. The maximum effluent concentration was 2.4 mg/L on July 11, 2006. Therefore, the discharge does not have has a reasonable potential to cause or contribute to an in-stream excursion above the Basin Plan's narrative objectives for oil and grease and floating material and State Water Board Resolution No. 68-16 (antidegradation policy). The previous permit, Order 96-104, included monthly average and daily maximum effluent limitations for oil and grease of 10 mg/L and 15 mg/L, respectively. This Order removes the effluent limitations for oil and grease based on new information consistent with antibacksliding requirements of 40 CFR 122.44(I)(2)(i)(B)(1). The Regional Water Board finds removing the effluent limitations for oil and grease is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution 68-16. Any impact on existing water quality will be insignificant. This order maintains the limitations for oil and grease in accordance with antibacksliding requirements contained in the Code of Federal Regulations. A daily maximum effluent limitation for oil and grease is included in the Order, in lieu of a weekly average, to ensure that the treatment works operate in accordance with design capabilities and to ensure that the Discharger requires proper removal and disposal of oil and grease from commercial food service sources and properly operates and maintains the collection system to minimize plugging from oil and grease.

## 12. In the NPDES Permit, Fact Sheet, Attachment F, Section IV.C.3.y. (Determining the Need for WQBELs):

Modify the paragraph as follows:

y. **Settleable Solids.** For inland surface waters, the Basin Plan states that "[w]ater shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses." The previous permit, Order 96-104, contained an AMEL and MDEL for settleable solids of 0.1 mL/L and 0.2 mL/L, respectively. Based on information included in selfmonitoring reports submitted by the Discharger, the effluent settleable solids was non-detectable (<0.1 mL/L) in all 363 samples in 2006. Therefore, the discharge does not have a reasonable potential to cause or contribute to an in-stream excursion above the Basin Plan's narrative objective for solids deposition.

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Moreover, the Facility will be utilizing tertiary treatment that further reduces the likelihood for excursion above the Basin Plan objective. This Order maintains the effluent limitations for settleable solids in accordance with anti-backsliding requirements contained in the Code of Federal Regulations. A daily maximum effluent limitation for settleable solids is included in the Order, in lieu of a weekly average, to ensure that the treatment works operate in accordance with design capabilities—Therefore, this Order removes the effluent limitations for settleable solids based on new information consistent with anti-backsliding requirements of 40 CFR 122.44(I)(2)(i)(B)(1). The Regional Water Board finds removing these effluent limitations is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution 68-16. Any impact on existing water quality will be insignificant.

## 13. In the NPDES Permit, Fact Sheet, Attachment F, Section VII.B.1.j. (Reopener Provisions):

Add the following paragraph:

- j. Thermal Impacts (Special Provision VI.C.1.j). The Discharger proposes to conduct four years of intensive monitoring of thermal impacts in the vicinity of the outfall and develop an appropriate range of mitigation measures, if necessary. Furthermore, as required by other regulations, the Discharger is required to conduct consultations with the United States Fish and Wildlife Services, National Marine Fisheries Service, and California Department of Fish and Game to develop mitigation measures for the protection of aquatic species, including rare, threatened, and endangered species protected under the Endangered Species Act. A reopener has been included to allow the Regional Water Board to reopen the permit should the thermal studies conducted by the Discharger and/or the consultations result in the need for new or revised temperature effluent limitations or requirements.
- 14. In the NPDES Permit, Fact Sheet, Attachment F, Section VII.B.3.d (CWC section 13263.3(d)(3) Pollution Prevention Plans):

Modify the paragraph as follows:

d. **CWC section 13263.3(d)(3) Pollution Prevention Plans.** The pollution prevention plans required for <u>aluminum</u>, copper, salinity, and mercury shall, at minimum, meet the requirements outlined in CWC section 13263.3(d)(3). The minimum requirements for the pollution prevention plans include the following:

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Add the following paragraph following VII.B.3.d.ix:

CWC section 13263.3(g) requires that the Regional Water Board make the pollution prevention plans available for public review, except to the extent that information is classified as confidential because it is a trade secret. Furthermore, CWC section 13263.3(e and f) allows the Regional Water Board to establish a schedule of actions identified in the pollution prevention plans for a discharger after the solicitation of public comments.

15. In the NPDES Permit, Fact Sheet, Attachment F, Section VII.B.4.f (Compliance Schedule for Final Effluent Limitations for Aluminum):

Modify the paragraph as follows:

- f. Compliance Schedule for Final Effluent Limitations for Aluminum (Special Provisions VI.C.4.f.). The Discharger shall comply with the following time schedule to ensure compliance with the final effluent limitations for aluminum.
- 16. In the WDRs, Provisions E.5:

Modify the provision as follows:

5. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," dated 1 March 1991, which are attached hereto and made part of this Order by reference. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)." To the extent there are duplicative requirements in the Standard Provisions, this Order, or Waste Discharge Requirements Order No. R5-2007- (NPDES Permit No. CA007914), the requirements only apply once.